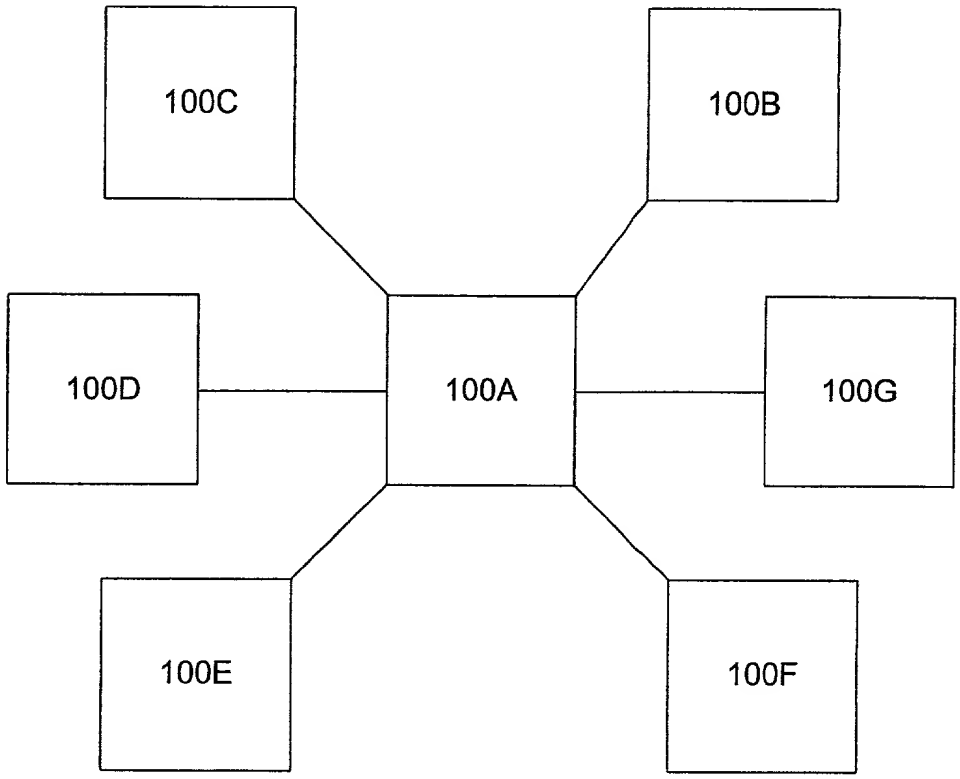

FIG. 1A

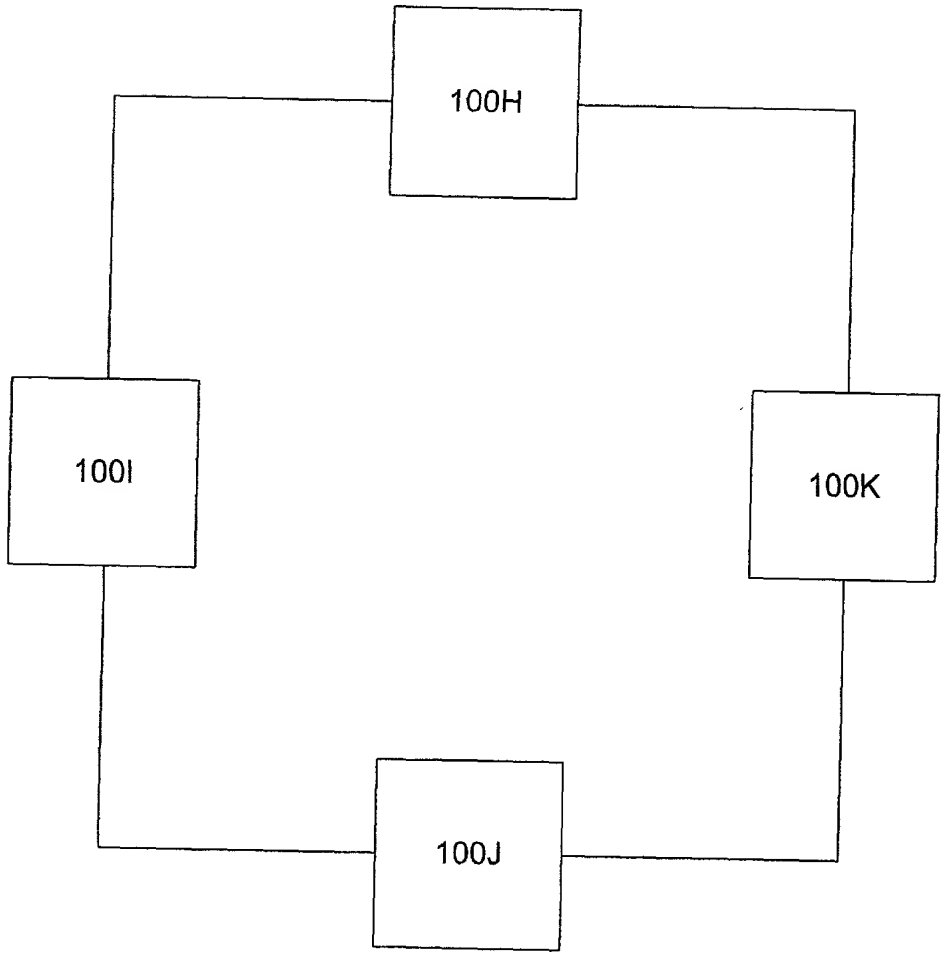

FIG. 1B

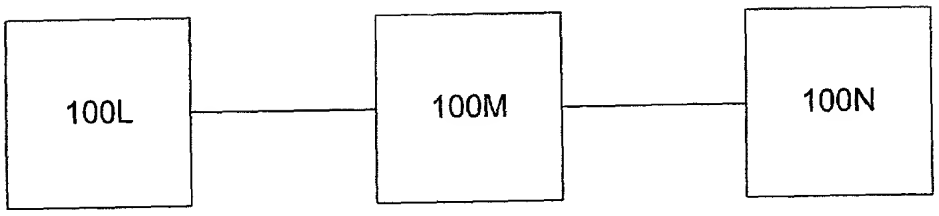

FIG. 1C

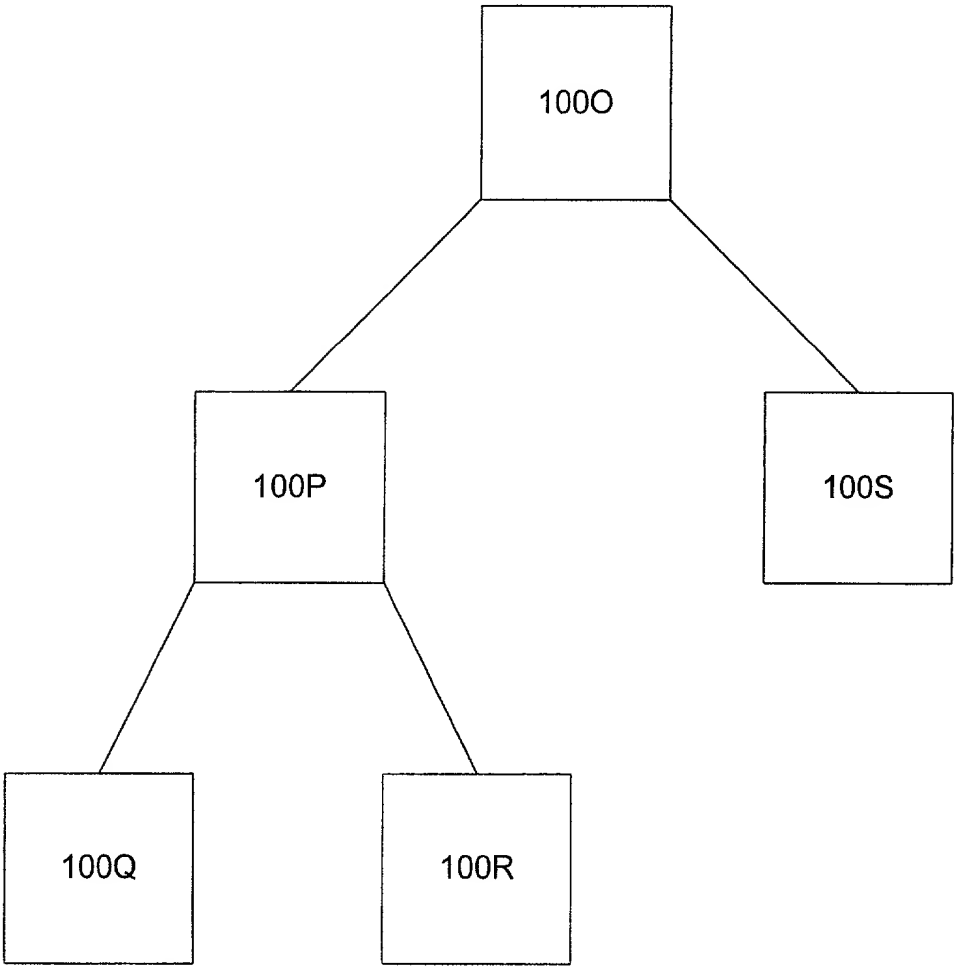

FIG. 1D

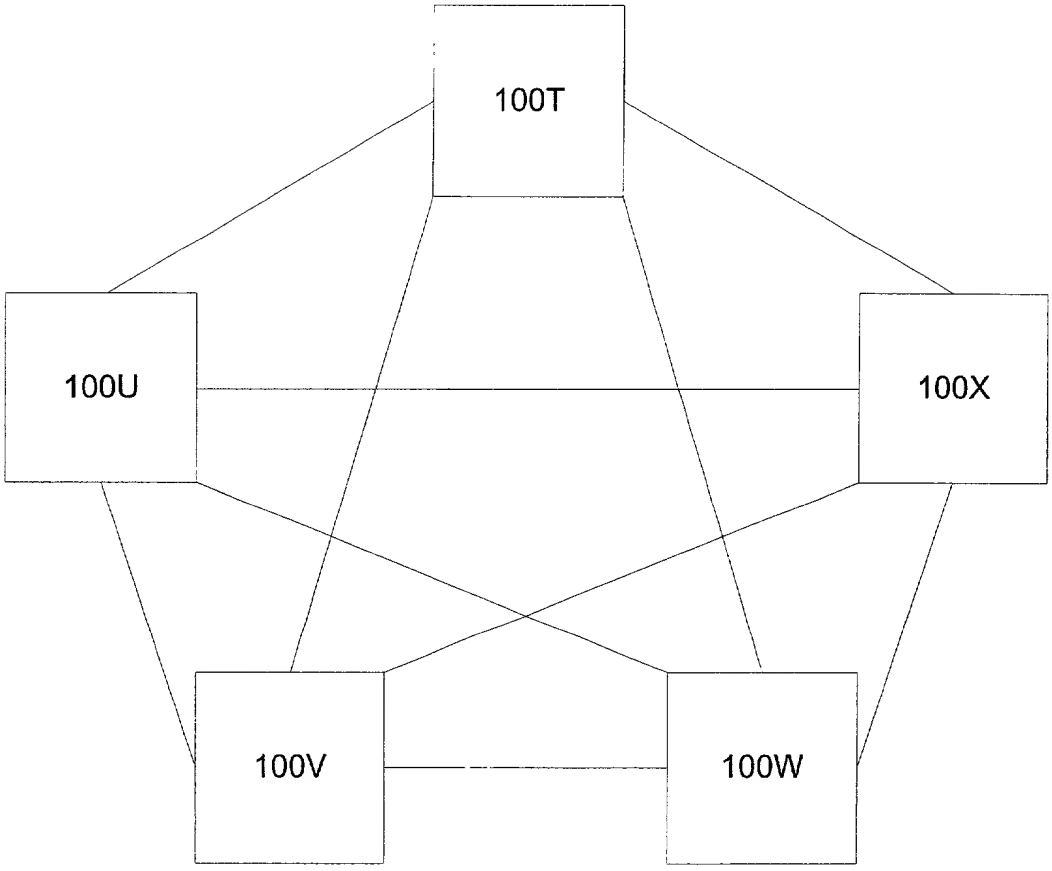

FIG. 1E

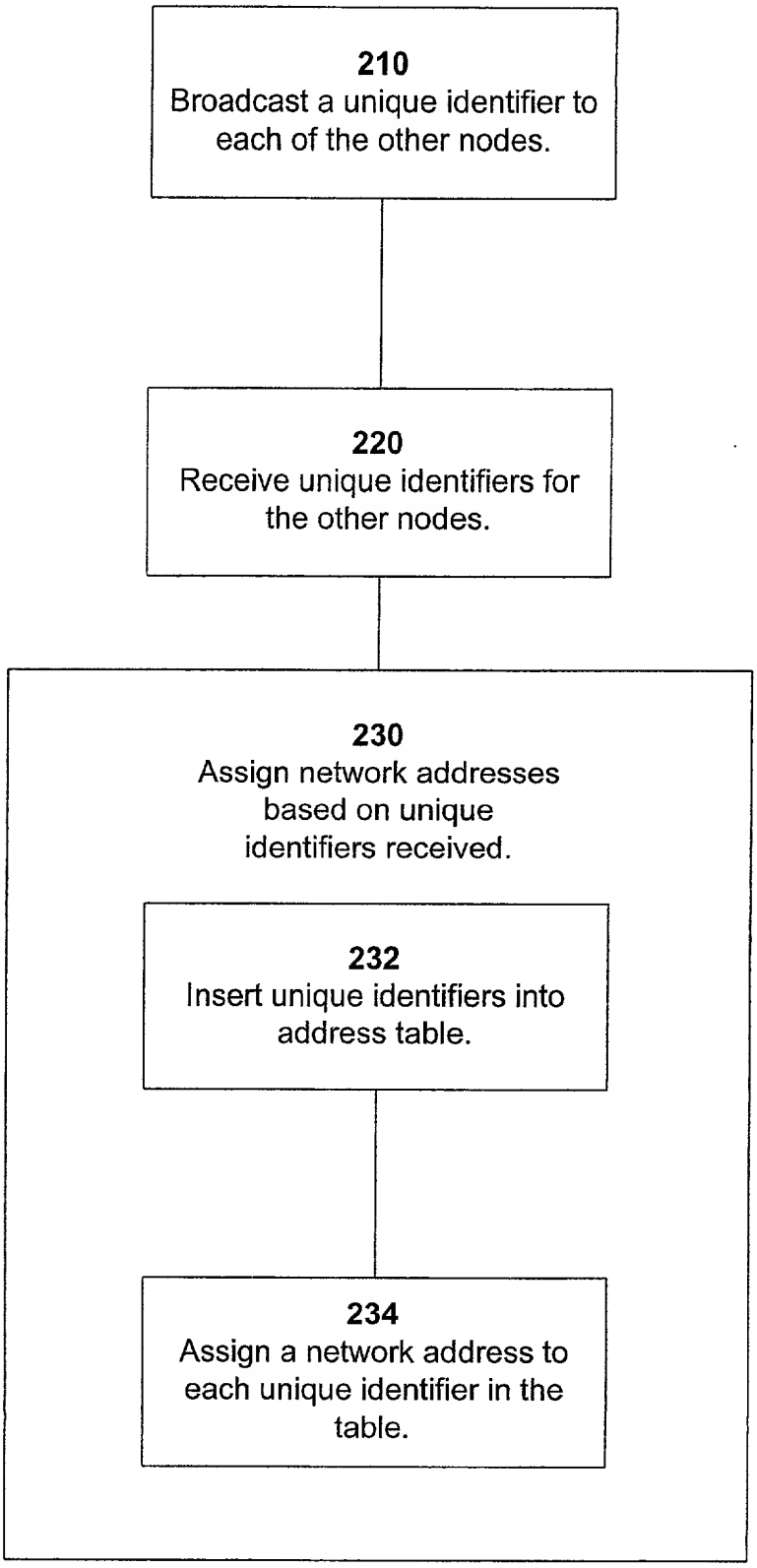
210
Broadcast a unique identifier to each of the other nodes.
200
220
Receive unique identifiers for the other nodes.
230
Assign network addresses based on unique identifiers received.
232
Insert unique identifiers into address table.
234
Assign a network address to each unique identifier in the table.

FIG. 2

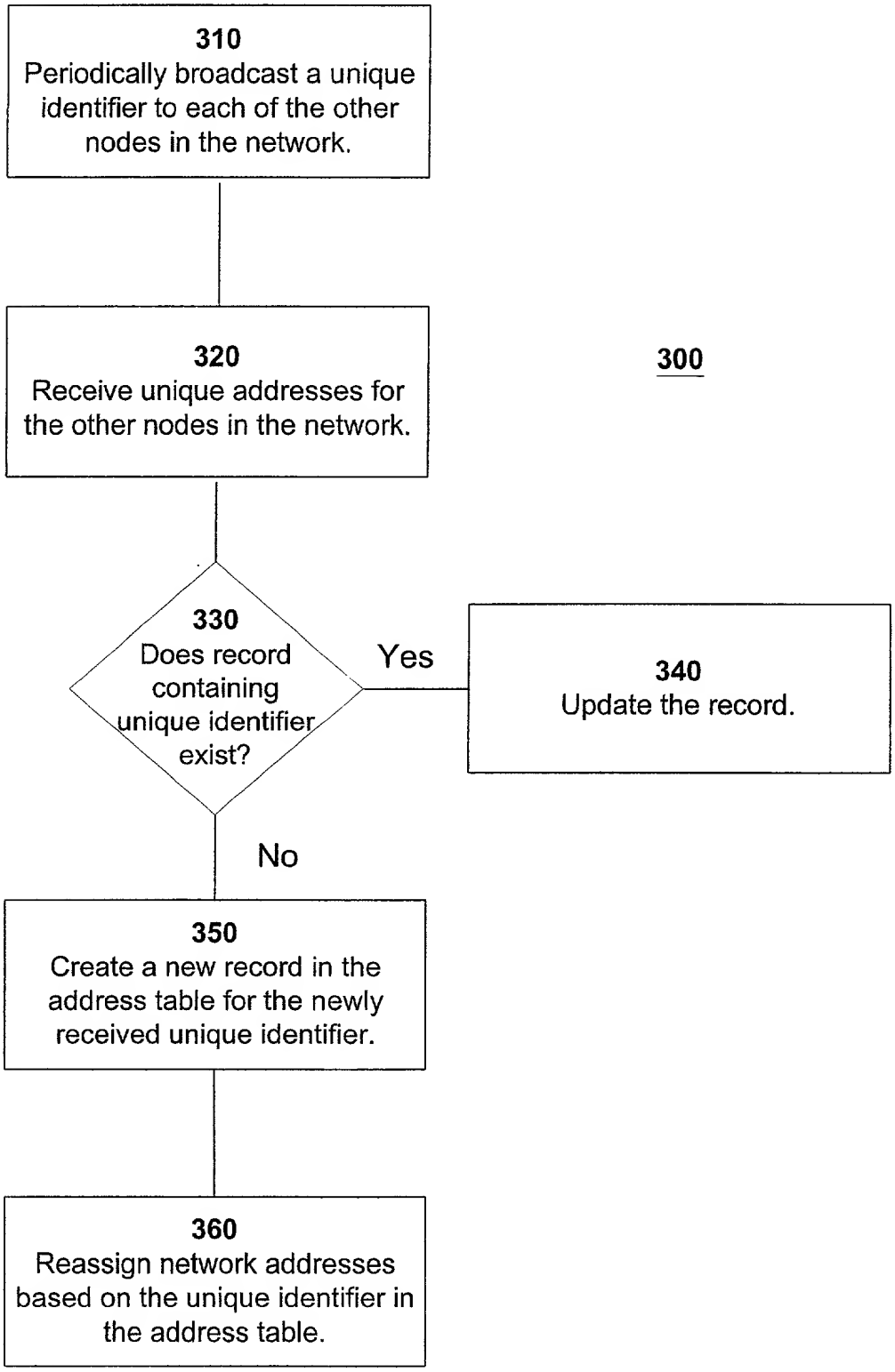
310
Periodically broadcast a unique identifier to each of the other nodes in the network.
320
Receive unique addresses for the other nodes in the network.
300
330
Does record containing unique identifier exist?
Yes
340
Update the record.
No
350
Create a new record in the address table for the newly received unique identifier.
360
Reassign network addresses based on the unique identifier in the address table.

FIG. 3

410 420 430

Node	Unique Identifier (MAC Address)	Network Address (IP Address)
100H	10.10.2	127.0.0.0
100I	10.10.3	127.0.0.1
100J	10.11.7	127.0.0.3
100K	10.10.9	127.0.0.2

400

FIG. 4A

410 420 430 440 450

Node	Unique Identifier (MAC Address)	Network Address (IP Address)	Time to Live	Expired
100H	10.10.2	127.0.0.0	15	0
100I	10.10.3	127.0.0.1	0	1
100J	10.11.7	127.0.0.3	15	0
100K	10.10.9	127.0.0.2	10.5	0

415

FIG. 4B

410 420 430 440 450

Node	Unique Identifier (MAC Address)	Network Address (IP Address)	Time to Live	Expired
100H	10.10.2	127.0.0.0	15	0
100J	10.10.7	127.0.0.3	15	0
100K	10.11.9	127.0.0.1	15	0
100L	10.10.12	127.0.0.2	15	0

425

FIG. 4C

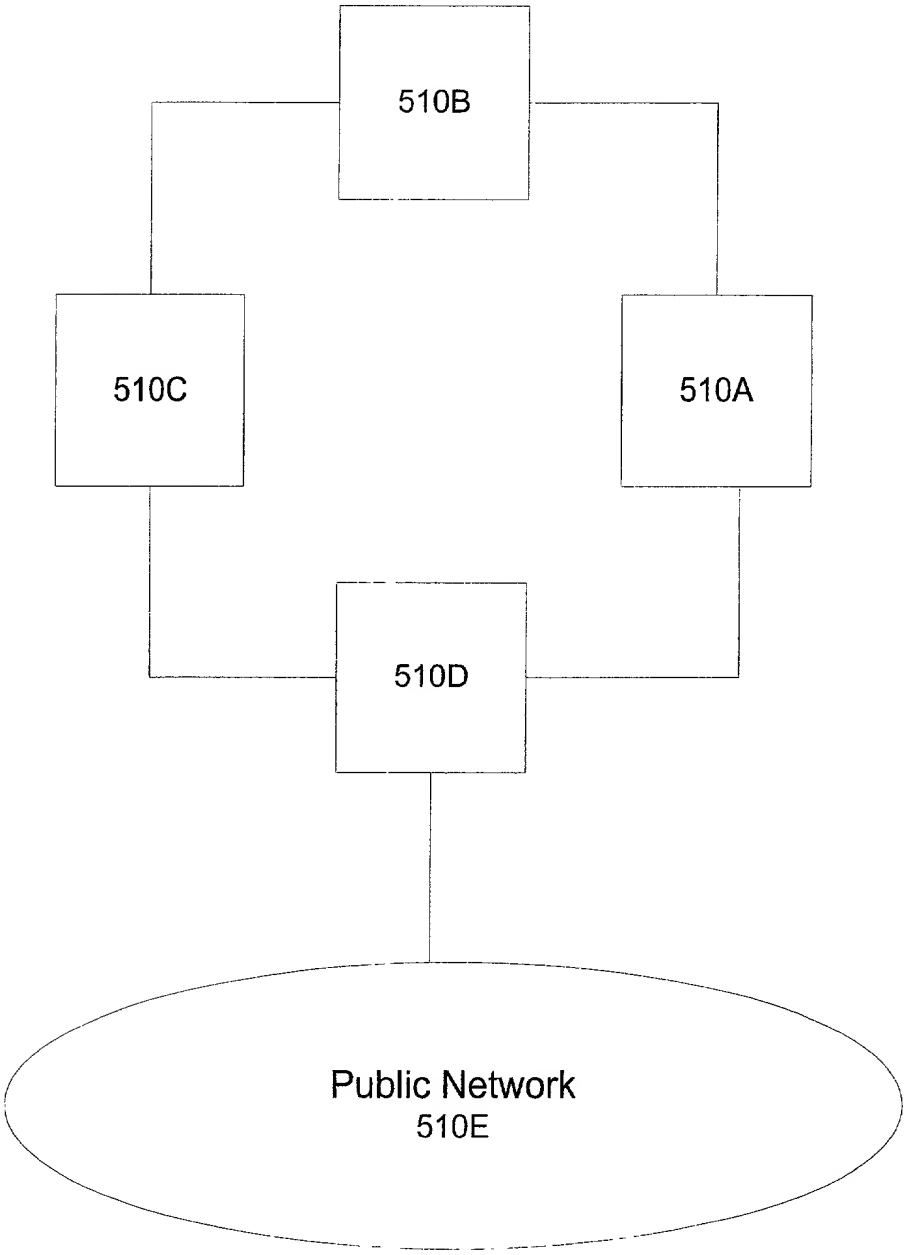

FIG. 5

410 420 430 440 450

Node	Unique Identifier (MAC Address)	Network Address (IP Address)	Time to Live	Expired
100H	10.10.2	127.0.0.0	15	0
100I	10.10.3	127.0.0.1	15	0
100J	10.11.7	127.0.0.2	15	0
100K	10.10.9	127.0.0.3	15	0

600

FIG. 6A

410	420	430	440	450	
Node	Unique Identifier (MAC Address)	Network Address (IP Address)	Time to Live	Expired	610
100H	10.10.2	127.0.0.0	15	0	
100I	10.10.3	127.0.0.1	15	0	
100J	10.11.7	127.0.0.2	0	1	
100K	10.10.9	127.0.0.3	0	1	

FIG. 6B

410 420 430 440 450

Node	Unique Identifier (MAC Address)	Network Address (IP Address)	Time to Live	Expired
100H	10.10.2	127.0.0.0	15	0
100I	10.10.3	127.0.0.1	15	0
100K	10.10.9	127.0.0.2	15	0

620

FIG. 6C

410 Node	420 Unique Identifier (MAC Address)	430 Network Address (IP Address)	440 Time to Live	450 Expired
100H	10.10.2	127.0.0.0	15	0
100I	10.10.3	127.0.0.1	15	0
100J	10.11.7	127.0.0.2	0	1
100K	10.10.9	127.0.0.3	15	0

630

FIG. 6D